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BARTON E. SHOWALTER
2001 ROSS AVENUE, 8TH FLOOR
DALLAS, TX 75201-2980

EXAMINER
VAN DOREN, BETH

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/641,666	WINNARD ET AL.	
	Examiner	Art Unit	
	Beth Van Doren	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The following is a non-final, first office action on the merits. Claims 1-45 are pending.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it exceeds the maximum word length of 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 22, and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 11, 22, and 39 recite the limitation "the late engineering design change". There is insufficient antecedent basis for this limitation in the claims or the claims on which they depend. For examination purposes, the limitations have been construed as --a late engineering design change--. Appropriate correction is required in each instance.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over "ROI Analysis" (Medicalogic.com) in view of DPL 4.0 (www.adainc.com).

7. As per claim 1, "ROI Analysis" teaches s method of operating a computer to perform an engineering change decision analysis of an engineering design change in a product, comprising:

displaying a list of change drivers that is driving the engineering design change and receiving a selection of a change driver from a user (See page 1, sections 3-5, and page 2, sections 2-4, wherein a list of change drivers is displayed and the user keeps/selects the ones that are factors in the change decision);

displaying a set of questions soliciting general cost information associated with the engineering design change (See page 2, sections 2 and 5-6, page 3, section 1-3, and page 5, wherein a set of inquiries that each require a reply are displayed and the user fills in the information concerning implementing a different system into the business);

displaying a set of questions soliciting change driver-specific information associated with the selected change driver (See page 2, sections 2 and 4-6, page 3, section 1-3, and page 7, wherein a set of inquiries that each require a reply are displayed and the user fills in the information concerning the selected system that causes the change);

receiving answers to the set of general cost questions from the user (See at least page 2, sections 2 and 5-6, page 3, section 1-3, and page 5, wherein the user enters answers to the inquiries);

receiving answers to the set of change driver-specific questions from the user (See at least page 2, sections 2 and 4-6, page 3, section 1-3, and page 7, wherein the user enters answers to the inquiries) ;

computing a score for cost associated with the engineering design change using the general cost answers (See at least page 2, sections 2 and 5-6, page 3, section 1-3, and page 5, wherein a score for cost is computed);

computing a value associated with not implementing the engineering design change using the change driver-specific answers (See at least page 2, sections 2 and 4-6, page 3, section 1-3, and page 7, wherein a value associated with not implementing the design change is computed); and

comparing the computed cost score and value and generating a recommendation of whether the engineering design change should be implemented in response to the comparison (See page 3, section 3, and pages 5-10, wherein the cost score and value are compared and a chart is generated that recommends, based on the comparison, whether or not to implement the change).

However, while "ROI Analysis" teaches computing a cost score using the general cost answers, "ROI Analysis" does not expressly disclose computing a cost associated with the engineering design change using the general cost answers.

DPL 4.0 discloses computing a cost associated with an engineering design change (See pages 1, 4, 12, 20, and 36-37, which discuss inputting and computing a cost).

Both DPL 4.0 and "ROI Analysis" disclose receiving data about multiple factors of a decision, analyzing these multiple factors, and communicating the results. It would have been obvious to one of ordinary skill in the art at the time of the invention to compute a cost instead of a cost score in order to increase the accuracy of making recommendations for a user by considering actual values associated with implementing the change. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

8. As per claim 2, "ROI Analysis" discloses a method wherein computing the cost associated with the engineering design change comprises:

computing a cost variance associated with future product service and the vendor/providers service of the product implemented with the engineering design change (See page 2, section 5, page 3, sections 1-3, and page 5, wherein the cost difference is considered);

computing a cost variance associated with producing the product manufactured with the engineering design change (See page 2, section 5, page 3, sections 1-3, and page 5, wherein the cost difference of constructing the new system or not is considered); and

summing the warranty cost variance with the production cost (See page 5, where the cost variances are summed to produce a score).

However, neither "ROI Analysis" nor DPL 4.0 expressly discloses a warranty for a manufactured product.

It is old and well known that product warranties impact the costs associated with a product, such as the service of administration, support, potential upgrades, in the software industry. The fact that the factor considered and valued is a product warranty has no functional significance to the limitations of the claim. Therefore, it would be obvious to one of ordinary skill in the art to consider product warranties when valuing a decision to implement a change in a product in order to more accurately make recommendations by considering a more complex array of values. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

9. As per claim 3, "ROI Analysis" discusses computing a cost score variance associated implementing a engineering design change (See at least page 2, section 5, page 3, sections 1-3, and page 5). However, "ROI Analysis" does not expressly disclose a warranty or the specific steps of claim 3.

DPL 4.0 discloses:

computing a first cost variance associated with the product manufactured with the engineering design change and underwent product verification testing (See pages 3, 17, 24, and 36, which discuss running tests on a product to compute a cost difference);

computing a second cost variance associated with the product manufactured with the engineering design change and without undergoing product verification testing (See pages 3, 17, 24, and 36, which discuss not running tests on a product to compute a cost difference);

selecting an optimum from the first and second cost variances (See pages 3, 22-24, 17, and 36, wherein a branch is selected and followed to choose an optimal solution).

However, DPL 4.0 does not expressly disclose a warranty.

It is old and well known that product warranties impact the costs associated with a product, such as the service of administration, support, potential upgrades, in the software industry. The fact that the factor considered and valued is a product warranty has no functional significance to the limitations of the claim. Therefore, it would be obvious to one of ordinary skill in the art to consider product warranties when valuing a decision to implement a change in a product in order to more accurately make recommendations by considering a more complex array of values. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

Furthermore, both DPL 4.0 and "ROI Analysis" disclose receiving data about multiple factors of a decision, analyzing these multiple factors (including variances associated with cost), and communicating the results. Testing in order to gain preliminary data about a possible change in a company's strategy (new product, new method, etc.) is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to include testing in the assessment of "ROI Analysis" in order to increase the accuracy of making recommendations to a user by considering actual values associated with implementing the change. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes, including considering testing, in order to take into account all the alternatives on at least pages 3, 17, 22-24, and 36.

10. As per claim 4, "ROI Analysis" teaches a method wherein computing a cost variance associated with producing the product comprises:

computing a first cost variance associated with assembly of the product with the engineering design change (See page 2, section 5, page 3, sections 1-3, and page 5, wherein a first cost difference is associated with putting together the modules and interfaces);

computing a second cost variance associated with developing to produce the product with the engineering design change (See page 2, section 5, page 3, sections 1-3, and page 5); and

summing the first and second cost variances (See page 5, where the cost variances are summed to produce a score).

However, neither "ROI Analysis" nor DPL 4.0 discloses tooling.

"ROI Analysis" discusses developing the system. DPL 4.0 discloses production costs of producing the new product of a widget as well as comparing two competing technologies in an engine development program. It is old and well known that tooling occurs in the production stage of producing products such as widgets and engines. Examiner points out that the fact that it is a tooling cost has no functional significance to the limitations of the claim. It would have been obvious to one of ordinary skill in the art at the time of the invention to include tooling in the production cost change estimates in order to increase the efficiency of the methodology in making accurate recommendations for a user by considering a more complex web of values when making the decision. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

11. As per claims 5, 6, and 12, "ROI Analysis" discloses a method, wherein displaying a set of general cost questions and receiving answers thereto comprise displaying a question/questions and receiving an answer/answers for the highest, best, or lowest future product service variance

estimates and the vendor/providers service associated with the product manufactured with and without the engineering design change without product verification testing, and respective probabilities, and receiving answers thereto (See page 2, section 5, page 3, sections 1-3, and page 5, wherein the user inputs the highest, best, or lowest assumption for the differences in future product service and vendor/provider service by implementing the product with a plan change for the business or by not implementing. Probabilities are input also associated with these change factors. These are done pre-implementation of product and are therefore without testing).

However, while "ROI Analysis" discloses future product service information and the service of the provider/vendor, it does not directly disclose product warranty estimates or requesting for highest, best, and lowest variance estimates.

DPL 4.0 teaches receiving a best and a lowest cost variance estimate for producing the product with the engineering design change, licensing information, and also teaches branch nodes (See pages 1, 4, 12, and 36-37, which discusses a best and lowest cost change assumption for producing the product, each with a .5 probability of occurrence. More than 2 branches can be used in more complex situations).

However, DPL 4.0 does not expressly disclose product warranty estimates.

It is old and well known that product warranties impact the costs associated with a product, such as the service of administration, support, potential upgrades, in the software industry. The fact that the factor considered and valued is a product warranty has no functional significance to the limitations of the claim. Therefore, it would be obvious to one of ordinary skill in the art to consider product warranties when valuing a decision to implement a change in a product in order to more accurately make recommendations by considering a more complex

array of values. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

Furthermore, Both "ROI Analysis" and DPL 4.0 discuss the analysis of decisions of a user with respect to a business using a computer-implemented methodology that takes in account the input of a user to compare options, as well a considering the weight or severity of the factor (such as highest, lowest, etc. and probabilities). It would have been obvious to one of ordinary skill in the art at the time of the invention to include input for each of the best, lowest, and highest estimates of cost variance in order to increase the efficiency of the methodology in making accurate recommendations for a user by considering a more complex web of values when making the decision. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

12. As per claim 7, "ROI Analysis" teaches a method, wherein displaying a set of general cost questions and receiving answers thereto comprise displaying a question requesting for highest, best, or lowest assembly cost variance estimate for implementing the product with the engineering design change, and respective probabilities, and receiving answers thereto (See page 2, section 5, page 3, sections 1-3, and page 5, wherein the user inputs the highest, best, or lowest assumption for the differences in the assembly cost by implementing the product with a plan change for the business and by not implementing. Probabilities are input also associated with these change factors).

However, "ROI Analysis" does not expressly disclose a question requesting for highest, best, and lowest assembly cost variance estimates for manufacturing the product with the engineering design change.

DPL 4.0 teaches receiving a best and a lowest cost variance estimate for producing the product with the engineering design change and also teaches branch nodes (See pages 1, 4, 12, and 36-37, which discusses a best and lowest cost change assumption for producing the product, each with a .5 probability of occurrence. More than 2 branches can be used in more complex situations).

Both "ROI Analysis" and DPL 4.0 discuss the analysis of decisions of a user with respect to a business using a computer-implemented methodology that takes in account the input of a user to compare options, as well a considering the weight or severity of the factor (such as highest, lowest, etc. and probabilities). It would have been obvious to one of ordinary skill in the art at the time of the invention to include input for each of the best, lowest, and highest estimates of cost variance in order to increase the efficiency of the methodology in making accurate recommendations for a user by considering a more complex web of values when making the decision. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

13. As per claim 8, "ROI Analysis" wherein displaying a set of general cost questions and receiving answers thereto comprise displaying a question requesting for highest, best, or lowest cost variance estimate for implementing the product with the engineering design change, and respective probabilities, and receiving answers thereto (See page 2, section 5, page 3, sections 1-

3, and page 5, wherein the user inputs the highest, best, or lowest assumption for the differences in the cost by implementing the product with a plan change for the business and by not implementing Probabilities are input also associated with these change factors).

However, "ROI Analysis" does not expressly disclose a question requesting for highest, best, and lowest tooling cost variance estimates for manufacturing the product with the engineering design change.

DPL 4.0 teaches receiving a best and a lowest cost variance estimate for producing the product with the engineering design change and also teaches branch nodes (See pages 1, 4, 12, and 36-37, which discusses a best and lowest cost change assumption for producing the product, each with a .5 probability of occurrence. More than 2 branches can be used in more complex situations).

However, DPL 4.0 does not expressly disclose that this cost is for tooling.

DPL 4.0 discloses production costs of producing the new product of a widget as well as comparing two competing technologies in an engine development program. It is old and well known that tooling occurs in the production stage of producing products such as widgets and engines. Examiner points out that the fact that it is a tooling cost has no functional significance to the limitations of the claim. It would have been obvious to one of ordinary skill in the art at the time of the invention to include tooling in the production cost change estimates in order to increase the efficiency of the methodology in making accurate recommendations for a user by considering a more complex web of values when making the decision. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

Furthermore, Both "ROI Analysis" and DPL 4.0 discuss the analysis of decisions of a user with respect to a business using a computer-implemented methodology that takes in account the input of a user to compare options, as well a considering the weight or severity of the factor (such as highest, lowest, etc. and probabilities). It would have been obvious to one of ordinary skill in the art at the time of the invention to include input for each of the best, lowest, and highest estimates of cost variance in order to increase the efficiency of the methodology in making accurate recommendations for a user by considering a more complex web of values when making the decision. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

14. As per claim 9, "ROI Analysis" teaches a method, wherein displaying a set of general cost questions and receiving answers thereto comprise displaying a question requesting for highest, best, or lowest incremental piece cost variance estimate for implementing the product with the engineering design change, and respective probabilities, and receiving answers thereto (See page 2, section 5, page 3, sections 1-3, and page 5, wherein the user inputs the highest, best, or lowest assumption for the differences in the cost for the interface/module pieces by implementing the product with a plan change for the business and by not implementing. Probabilities are also input associated with these change factors).

However, "ROI Analysis" does not expressly disclose a question requesting for highest, best, and lowest assembly cost variance estimates for manufacturing the product with the engineering design change.

DPL 4.0 teaches receiving a best and a lowest cost variance estimate for producing the product with the engineering design change and also teaches branch nodes (See pages 1, 4, 12, and 36-37, which discusses a best and lowest cost change assumption for producing the product, each with a .5 probability of occurrence. More than 2 branches can be used in more complex situations).

Both "ROI Analysis" and DPL 4.0 discuss the analysis of decisions of a user with respect to a business using a computer-implemented methodology that takes in account the input of a user to compare options, as well a considering the weight or severity of the factor (such as highest, lowest, etc. and probabilities). It would have been obvious to one of ordinary skill in the art at the time of the invention to include input for each of the best, lowest, and highest estimates of cost variance in order to increase the efficiency of the methodology in making accurate recommendations for a user by considering a more complex web of values when making the decision. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

15. As per claim 10, "ROI Analysis" teaches a method wherein displaying a list of change drivers comprises displaying a list including management directed, customer satisfaction, quality, cost, feasibility, and missed objective change drivers (See page 2, section 4, and pages 5, 7, and 8, which discloses a list of change drivers including cost, quality, customer satisfaction, management, feasibility, and missed objective change drivers).

16. As per claim 11, "ROI Analysis" teaches a method wherein displaying a set of questions soliciting change driver-specific information comprises displaying a question requesting whether

a required condition will be met by implementing an engineering design change, by ongoing product upgrades and support, by the failure of product to deliver the benefits promised, " by the provider and executive time needed to make project succeed, etc. (See at least page 5). However, "ROI Analysis" does not expressly disclose that the question is about implementing a late engineering design change.

"ROI Analysis" discloses an editable and customizable list of questions concerning the implementation of a product in a system that will cause a redesign to said system. It is known in the art that product upgrades would be a type of late engineering design changes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a question about a late engineering design change in the questions of "ROI Analysis" in order to more accurately assess whether or not to implement the product by considering a more comprehensive list of factors. See page 2, sections 4 and 6, which discusses the inclusion of more factors making the assessment more complex.

17. As per claim 13, "ROI Analysis" discloses a method wherein displaying a set of questions soliciting change driver-specific information comprises displaying a question concerning use information of customers despite the lack of implementing the engineering design change (See pages 5-10, which disclose a customizable list of questions including ones that consider use of the system with or without the design change of implementing the product). However, "ROI Analysis does not expressly disclose a question requesting a percentage of customers who purchase the product despite the lack of implementing the engineering design change.

"ROI Analysis" discloses receiving answers to questions that represent items such as the employee resistance to change and use of the system without the implementation of the product. It would have been obvious to one of ordinary skill in the art at the time of the invention to include actual percentages of customers who use the system despite the design change in order to make more accurate recommendations for a user by considering a more complex web of values when making the decision. Furthermore, "ROI Analysis" discloses analyzes a design change to a system by implementing a product in said system. Therefor, it would have been obvious to one of ordinary skill in the art at the time of the invention to consider a design change to the product as well in order to again increase the accuracy of recommendations for a user by considering a more complex web of choices when making the decision.

18. As per claim 14, "ROI Analysis" discloses a method of operating a computer to perform an engineering change decision analysis of an engineering design change in a product, comprising:

receiving a selection of a change driver that is driving the engineering design change (See page 1, sections 3-5, and page 2, sections 2-4, wherein a list of change drivers is displayed and the user keeps/selects the ones that are factors in the change decision);

receiving general cost information associated with the engineering design change (See at least page 2, sections 2 and 5-6, page 3, section 1-3, and page 5, wherein the user enters general cost information);

receiving change driver-specific information associated with the selected change driver (See at least page 2, sections 2 and 4-6, page 3, section 1-3, and page 7, wherein the user enters change driver-specific information);

computing a score for cost associated with the engineering design change using the general cost answers (See at least page 2, sections 2 and 5-6, page 3, section 1-3, and page 5, wherein a score for cost is computed);

computing a value associated with not implementing the engineering design change using the change driver-specific information (See at least page 2, sections 2 and 4-6, page 3, section 1-3, and page 7, wherein a value associated with not implementing the design change is computed); and

comparing the computed cost and value and generating a recommendation of whether the engineering design change should be implemented in response to the comparison (See page 3, section 3, and pages 5-10, wherein the cost score and value are compared and a chart is generated that recommends, based on the comparison, whether or not to implement the change).

However, while "ROI Analysis" teaches computing a cost score using the general cost answers, "ROI Analysis" does not expressly disclose computing a cost associated with the engineering design change using the general cost answers.

DPL 4.0 discloses computing a cost associated with an engineering design change (See pages 1, 4, 12, 20, and 36-37, which discuss inputting and computing a cost).

It would have been obvious to one of ordinary skill in the art at the time of the invention to compute a cost instead of a cost score in order to increase the accuracy of making recommendations for a user by considering actual values associated with implementing the change. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

19. As per claim 15, "ROI Analysis" teaches a method further comprising:

receiving an identification of specific data in the general cost information or the change driver-specific information to vary (See page 1, sections 3-5, and page 2, sections 2-4, wherein a list of change drivers is displayed and the user keeps/selects the ones that are factors in the change decision and then enters values for these factors);

varying the specific data (See at least page 2, sections 2 and 5-6, page 3, section 1-3, and page 5, the data is changed using the designated weighting factor, etc.); and

comparing the computed cost score and value and generating an output in response to varying the specific data (See page 3, section 3, and pages 5-10, wherein the cost score and value are compared and an output is generated and displayed).

However, while "ROI Analysis" teaches computing a cost score using the general cost answers, "ROI Analysis" does not expressly disclose computing a cost associated with the engineering design change using the general cost answers.

DPL 4.0 discloses computing a cost associated with an engineering design change (See pages 1, 4, 12, 20, and 36-37, which discuss inputting and computing a cost).

It would have been obvious to one of ordinary skill in the art at the time of the invention to compute a cost instead of a cost score in order to increase the accuracy of making recommendations for a user by considering actual values associated with implementing the change. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

20. As per claims 16-24, claims 16-24 are rejected using the same art and rationale relied upon in the rejection of claims 5-13, respectively.

21. As per claim 25, "ROI Analysis" discloses a method wherein receiving change driver-specific information comprises receiving data concerning use information of customers despite the lack of implementing the engineering design change and correcting the product at a later time (See pages 5-10, which disclose a customizable list of questions including ones that consider use of the system with or without the design change of implementing the product. "ROI Analysis" also discloses the costs associated with a product, such as the service of administration, support, potential upgrades, in the software industry). However, "ROI Analysis does not expressly disclose receiving a percentage of customers who purchase the product despite the lack of implementing the engineering design change or a warranty.

It is old and well known that product warranties impact the costs associated with a product, such as the service of administration, support, potential upgrades, in the software industry. The fact that the factor considered and valued is a product warranty has no functional significance to the limitations of the claim. Therefore, it would be obvious to one of ordinary skill in the art to consider product warranties when valuing a decision to implement a change in a product in order to more accurately make recommendations by considering a more complex array of values. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

Additionally, "ROI Analysis" discloses receiving answers to questions that represent items such as the employee resistance to change and use of the system without the

implementation of the product. It would have been obvious to one of ordinary skill in the art at the time of the invention to include actual percentages of customers who use the system despite the design change in order to make more accurate recommendations for a user by considering a more complex web of values when making the decision. Furthermore, "ROI Analysis" discloses analyzes a design change to a system by implementing a product in said system. Therefor, it would have been obvious to one of ordinary skill in the art at the time of the invention to consider a design change to the product as well in order to again increase the accuracy of recommendations for a user by considering a more complex web of choices when making the decision.

22. As per claim 26, "ROI Analysis" discloses a method wherein receiving change driver-specific information comprises receiving a probability for addressing feasibility issues by changing assembly process, and by adding manpower and assembly time, instead of implementing the engineering design change (See page 5, wherein viability is looked at as well as adding manpower and time for both implementing and not implementing the product. Probabilities are assigned to these situations).

23. As per claim 27, "ROI Analysis" discloses a method wherein receiving change driver-specific information comprises receiving information on lost production due to feasibility issues and not implementing the engineering design change (See page 5, wherein lost production and feasibility issues are considered for implementing and not implementing the product).

24. As per claims 28-30, claims 28-30 are rejected using the same art and rationale relied upon in the rejection of claims 2-4, respectively.

25. As per claim 31, "ROI Analysis" teaches a computer-implemented engineering change decision analysis system for analyzing an engineering design change in a product, comprising:

a graphical user interface operating on a computer to receive a selection of a change driver that is driving the engineering design change, general cost information associated with the engineering design change, and change driver-specific information associated with the selected change driver (See at least page 1, sections 3-5, page 2, sections 2-6, page 3, section 1-3, and pages 5 and 7-8, which discloses a GUI that receives a selection of a change driver, general cost information, and change-driver specific information associated with the change driver);

an analysis logic program operating the computer to compute a cost score associated with the engineering design change using the general cost information, a value associated with not implementing the engineering design change using the change driver-specific information, and compare the computed cost score and value and generate a recommendation of whether the engineering design change should be implemented in response to the comparison (See at least page 2, sections 2-6, page 3, section 1-3, and pages 5, 7, and 10, wherein a program on the computer analyzes and computes a score for cost associated with the engineering change using the received information and compares the scores to generate a recommendation).

However, while "ROI Analysis" teaches computing a cost score using the general cost answers, "ROI Analysis" does not expressly disclose computing a cost associated with the engineering design change using the general cost answers.

DPL 4.0 discloses computing a cost associated with an engineering design change (See pages 1, 4, 12, 20, and 36-37, which discuss inputting and computing a cost).

It would have been obvious to one of ordinary skill in the art at the time of the invention to compute a cost instead of a cost score in order to increase the accuracy of making recommendations for a user by considering actual values associated with implementing the change. DPL 4.0 discusses using decision methodologies to generate complete, comprehensive, and focused analyses for business purposes in order to take into account all the alternatives on at least page 22.

26. As per claims 32, 33-38, and 40-41, claims 32, 33-38, and 40-41 are system implementations of the method of claims 15, 5-10, and 12-13, respectively. Therefore, claims 32, 33-38, and 40-41 are rejected using the same art and rationale relied upon in the rejections of claims 15, 5-10, and 12-13, respectively.

27. As per claim 39, "ROI Analysis" teaches a system wherein the graphical user interface is operable to receive change driver-specific information comprising an indication of whether a required condition will be met by implementing an engineering design change, and wherein the analysis logic program generating a recommendation of not implementing the engineering design change in response to the indication that the required condition will not be met (See at least pages 5, 6, and 10, wherein the questions of whether a required condition will be met by implementing an engineering design change, by ongoing product upgrades and support, by the failure of product to deliver the benefits promised, " by the provider and executive time needed to make project succeed, etc. are considered and a recommendation is generated based on the answers to these questions).

However, "ROI Analysis" does not expressly disclose that the question is about implementing a late engineering design change.

"ROI Analysis" discloses an editable and customizable list of questions concerning the implementation of a product in a system that will cause a redesign to said system. It is known in the art that product upgrades would be a type of late engineering design changes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a question about a late engineering design change in the questions of "ROI Analysis" in order to more accurately assess whether or not to implement the product by considering a more comprehensive list of factors. See page 2, sections 4 and 6, which discusses the inclusion of more factors making the assessment more complex.

28. As per claims 42 and 43-45, claims 42 and 43-45 are system implementations of the method of claims 26 and 2-4, respectively. Therefore, claims 42 and 43-45 are rejected using the same art and rationale relied upon in the rejections of claims 26 and 2-4, respectively.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eder (U.S. 6,321,205) discloses modeling and analyzing business improvement programs by looking at value drivers of the company and assessing future values.

Grune et al. (U.S. 6,490,569) teaches a tool that assesses cost of products based on drivers.

Powers (U.S. 5,956,691) discloses a dynamic illustration system for insurance products that uses variable keys to calculate "what if" scenarios and show feedback.

Beach et al. (U.S. 5,924,077) teaches assessing the value and potential value of business activities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

bvd
September 3, 2003

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600